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(54) Fault tolerant computer system with fault isolation and repair.

(57) A fault tolerant computer system has a central processing system which includes at least one set of data pathways, and executes a series of data processing instructions including the transfer of messages along the plurality of data pathways. At least one set of transaction data storage devices are coupled to the data pathways for storing a predetermined number of successive messages transferred most recently on the data pathways. Error checking devices are included for detecting the presence of errors in the central processing system. Error storage devices are coupled to the transaction data storage devices and the error checking devices for causing the transaction data storage devices to cease storing additional messages in response to the detection of errors by the error checking device.

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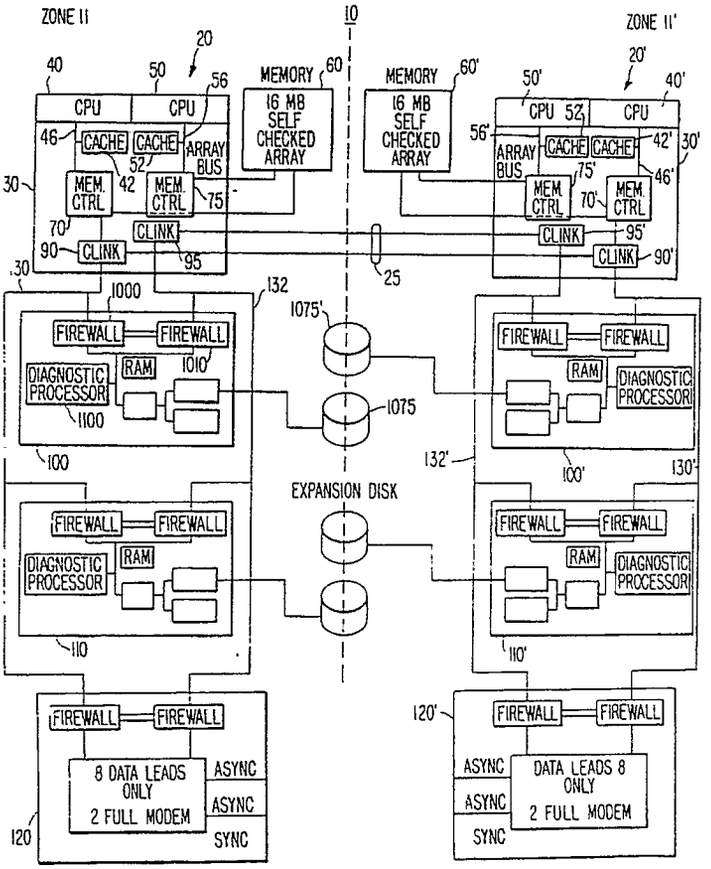
FIG. 1.


ZONE 11
10
ZONE 11'
20
20'
40
50
56
MEMORY
60
16 MB SELF CHECKED ARRAY
CPU
CACHE
ARRAY BUS
46
52
42
30
MEM. CTRL
75
70
90
CLINK
95
25
1000
132
FIREWALL
RAM
1010
DIAGNOSTIC PROCESSOR
1100
100
1075'
1075
EXPANSION DISK
110
120
8 DATA LEADS ONLY
2 FULL MODEM
ASYNC
SYNC
50'
40'
56'
42'
30'
75'
46'
70'
95'
90'
132'
100'
130'
110'
120'
DATA LEADS 8 ONLY

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EUROPEAN SEARCH REPORT

Application Number

EP 88 30 7964

DOCUMENTS CONSIDERED TO BE RELEVANT

Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	EP-A-0 077 154 (STRATUS COMPUTER, INC.) * Page 26, line 29 - page 32, line 6; page 58, line 26 - page 60, line 24; page 77, lines 15-20 *	1,9	G 06 F 11/00
A	PATENT ABSTRACTS OF JAPAN, vol. 9, no. 137 (P-363)[1860], 12th June 1985; & JP-A-60 019 247 (NIPPON DENKI K.K.) 31-01-1985 * Abstract *	1-3,9,10	
A	IEEE MICRO, vol. 4, no. 6, December 1984, pages 34-43; R. EMMERSON et al.: "Fault tolerance achieved in VLSI" * Page 36, column 2, line 9 - page 41, column 1, line 17 *	1-3,7,9, 10	
A	US-A-4 380 058 (WAKAI) * Whole document *	1-3,9,10, 19	
A	US-A-3 725 880 (SACHS) * Abstract; column 1, lines 30-63 *	1,9,17	
A	US-A-4 030 074 (GIORCELLI) * Abstract; column 1, line 39 - column 8, line 48 *	1,4,9	

TECHNICAL FIELDS SEARCHED (Int. Cl.5)

G 06 F 11

The present search report has been drawn up for all claims

Place of search	Date of completion of search	Examiner
The Hague	28 January 91	HERREMAN,G.L.O.

CATEGORY OF CITED DOCUMENTS

X: particularly relevant if taken alone
Y: particularly relevant if combined with another document of the same catagory
A: technological background
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